

## CONTINUOUS BLENDING FOR GAS ANALYZER CALIBRATION

### ABSTRACT OF THE DISCLOSURE

**[0032]** A method for calibrating a plurality of gas analyzers includes providing gas analyzers that measure the concentrations of gases. A span gas includes a mixture of the gases. A calibration mixture is

5 supplied to the gas analyzers that includes the span gas and a non-reactive zero gas. At least one of a concentration of the non-reactive zero gas and a concentration of the span gas is varied in the calibration mixture as a function of time. The gas analyzers generate sets of readings of the concentrations of the gases. A controller generates

10 response functions of the gas analyzers based on the sets of readings. The controller determines exact concentrations of the gases in the calibration mixture based on a set of readings from a gas analyzer with a predetermined response to a gas. The controller calibrates the gas analyzers based on the response functions and the exact

15 concentrations.